

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BOG POND	Lake Area (ha):	40.02
Town: DANBURY	Maximum depth (m):	3.0
County: Merrimack	Mean depth (m):	0.6
River Basin: Merrimack	Volume (m <sup>3</sup> ):	241500
Latitude: 43°30' N	Relative depth:	0.4
Longitude: 71°51' W	Shore configuration:	2.72
Elevation (ft): 815	Areal water load (m/yr):	22.30
Shore length (m): 6100	Flushing rate (yr <sup>-1</sup> ):	36.90
Watershed area (ha): 1757.7	P retention coeff.:	0.47
% watershed ponded: 0.2	Lake type:	natural w/dam

BIOLOGICAL:

19 January 1988

28 August 1987

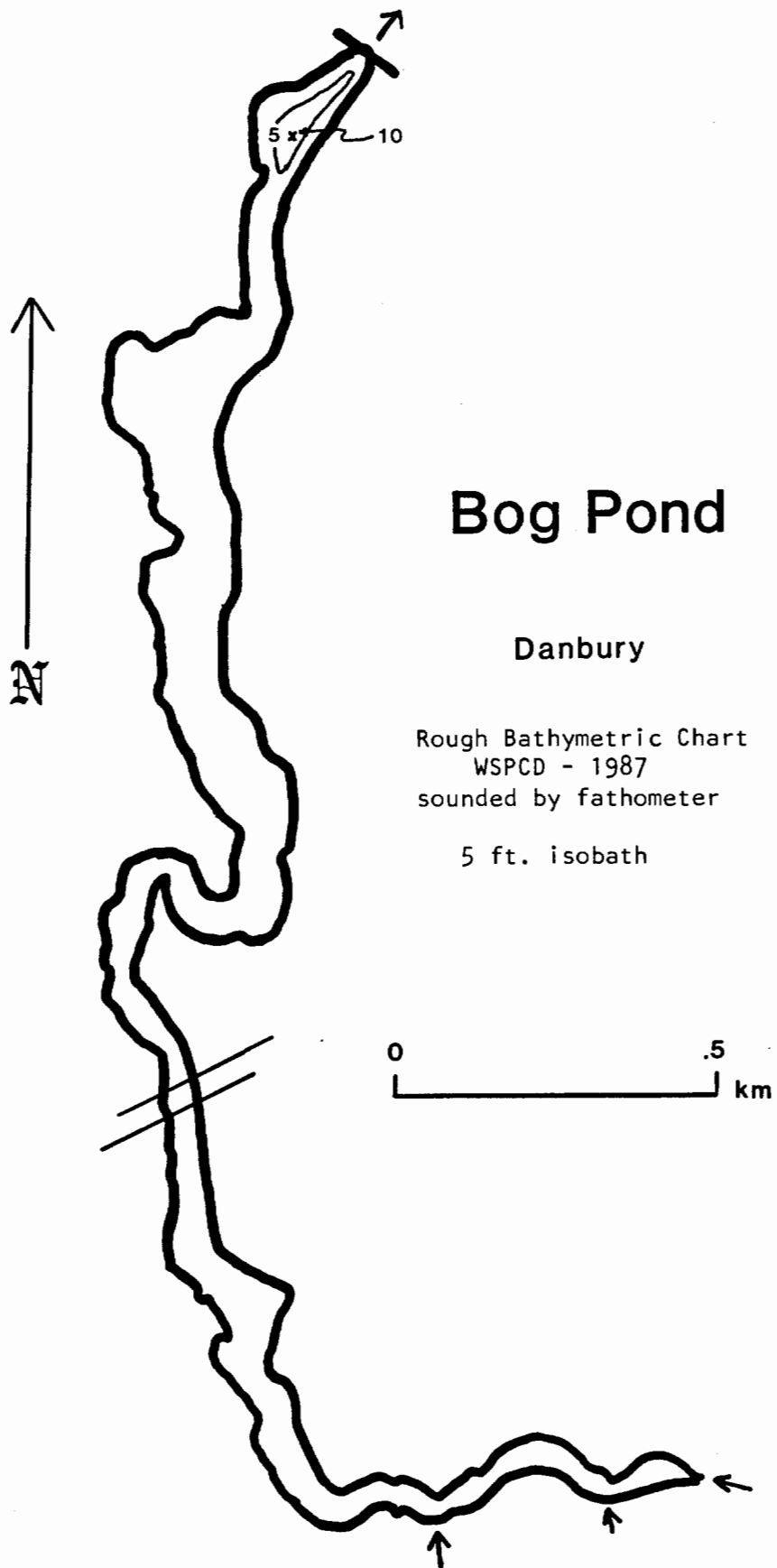
DOM. PHYTOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	PENNATE DIATOM SPP. 50%
#2		DINOBRYON 15%
#3		CHRYOSOPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)		590.0
CHLOROPHYLL-A (µg/L)		5.48
DOM. ZOOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	NAUPLII LARVAE 87%
#2		CYCLOPOID COPEPOD 7%
#3		
ROTIFERS/LITER	8	22
MICROCRUSTACEA/LITER	0	338
ZOOPLANKTON ABUNDANCE (#/L)	8	360
VASCULAR PLANT ABUNDANCE		Very abundant
SECCHI DISK TRANSPARENCY (m)		1.7
BOTTOM DISSOLVED OXYGEN (mg/L)	3.2	7.0
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None

<u>CHEMICAL:</u>		Lake: BOG POND Town: DANBURY				
	19 January 1988		28 August 1987			
DEPTH (m)	1.0	1.5	1.0		1.5	
pH (units)	5.7	5.8	6.5		6.7	
A.N.C. (Alkalinity)	6.0	6.5	13.7		10.5	
NITRATE NITROGEN	0.06	0.09	< 0.05		< 0.05	
TOTAL KJELDAHL NITROGEN	0.17	0.26			0.49	
TOTAL PHOSPHORUS	0.008	0.008	0.036		0.011	
CONDUCTIVITY ( $\mu$ mhos/cm)	36.9	36.6	34.3		34.2	
APPARENT COLOR (cpu)	65	65	80		80	
MAGNESIUM			0.66			
CALCIUM			0.1			
SODIUM			2.7			
POTASSIUM			0.20			
CHLORIDE	< 2	< 2	2		< 2	
SULFATE	2	1	3		3	
TN : TP	29	44			45	
CALCITE SATURATION INDEX			4.7			
All results in mg/L unless indicated otherwise						
<u>TROPHIC CLASSIFICATION: 1987</u>						
	D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
	**	3	4	1	8	Eutro.
<u>COMMENTS:</u>						
<ol style="list-style-type: none"> <li>1. Also called Danbury Bog.</li> <li>2. This is not a pond. It is a wetland area with a narrow channel of partly open water in the northern half. The southern half had no open water channel and was not navigable.</li> <li>3. The whole-water phytoplankton was dominated by greens (55%) and Cryptomonads (25%). Tiny green flagellates (45%) and <u>Cryptomonas</u> (25%) were the dominant genera.</li> </ol>						



# FIELD DATA SHEET

LAKE: BOG POND TOWN: DANBURY  
DATE: 08/28/87 WEATHER: RAIN

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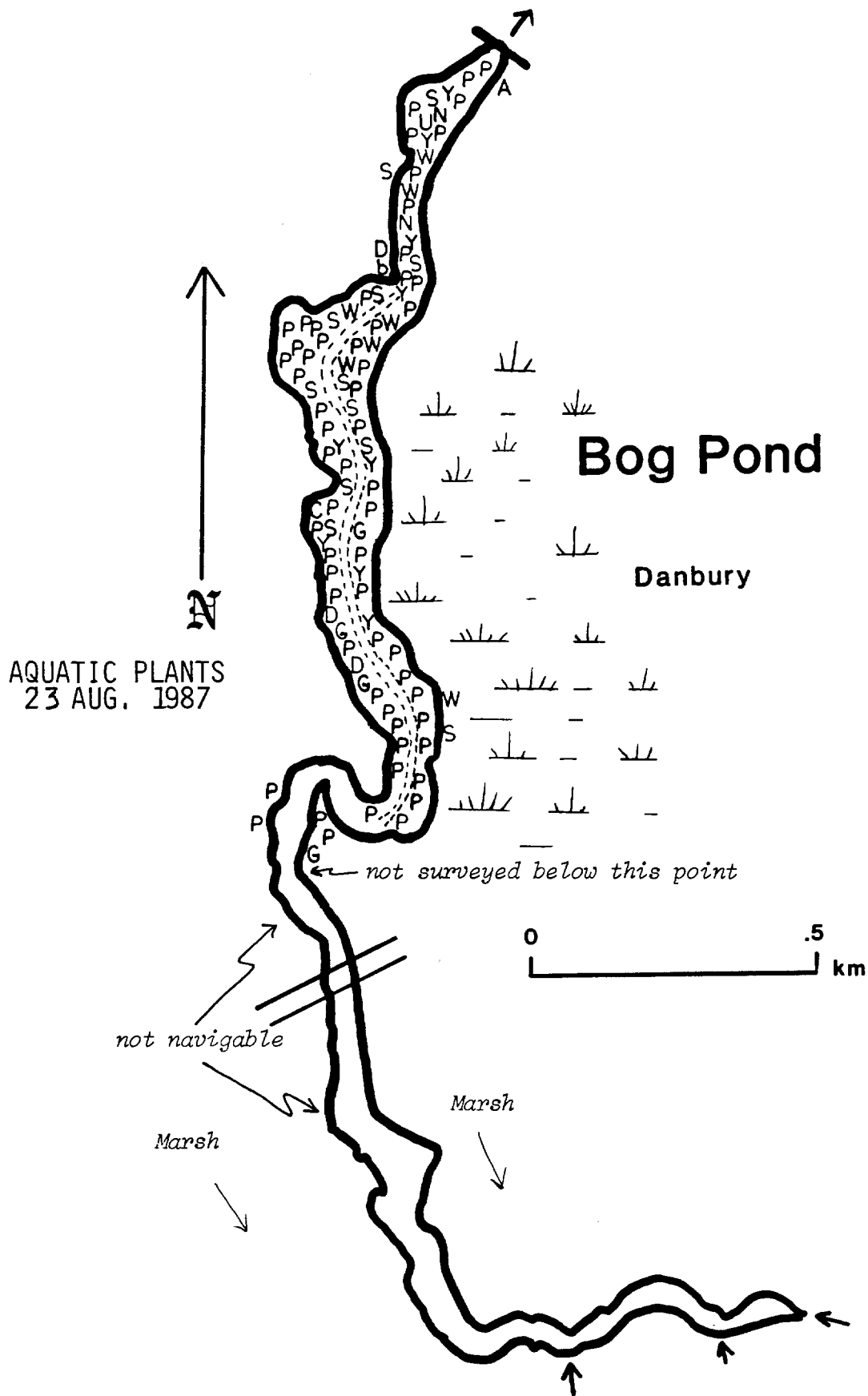
SECCHI DISK (m): 1.7 COMMENTS:

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BOTTOM DEPTH (m): 1.8

TIME: 1124

\*Dissolved oxygen values are in mg/L



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